

IN THE CLAIMS:

1. (currently amended) An image processing method comprising the steps of:

adapting a reference image and a plurality of images for a granulometric analysis;

obtaining a pattern spectrum of the reference image from the granulometric analysis;

checking for a similarity between the pattern spectrum and each of the plurality of images;

extracting a plurality of candidate images that are similar to [[a]] the reference image from among a the plurality of images by utilizing granulometry based on the granulometric analysis;

transforming the extracted plurality of candidate images on the basis of the reference image;

calculating mutual information shared by each of the plurality of transformed candidate images and the reference image; and

selecting a candidate image, which shares [[the]] a largest amount of mutual information with the reference image, from among the plurality of transformed candidate images.

2. (currently amended) The image processing method according to Claim 1, wherein said transformation transforming the extracted plurality of candidate images on the basis of the reference image includes matching of magnifications by matching a size of each of the extracted plurality of candidate images with a size of the reference image.

3. (currently amended) The image processing method according to Claim 1, wherein said transformation includes alignment of barycenters by aligning a barycenter of each of the extracted plurality of candidate images with a barycenter of the reference image.

4. (currently amended) The image processing method according to Claim 1, wherein the reference image and the plurality of candidate images are medical images.

5. (currently amended) An image processing apparatus comprising:

an adapting device configured to adapt a reference image and a plurality of images for a granulometric analysis;

an obtaining device configured to obtain a pattern spectrum of the reference image from the granulometric analysis;

a checking device configured to check for a similarity between the pattern spectrum and each of the plurality of images;

an extracting means for extracting device configured to extract a plurality of candidate images that are similar to [[a]] the reference image from among [[a]] the plurality of images by utilizing granulometry based on the granulometric analysis;

a transforming device for transforming configured to transform the plurality of extracted candidate images on the basis of the reference image;

a calculating device for calculating configured to calculate mutual information shared by each of the plurality of transformed candidate images and the reference image; and

a selecting device for selecting configured to select a candidate image, which shares [[the]] a largest amount of mutual information with the reference image, from among the plurality of transformed candidate images.

6. (currently amended) The image processing apparatus according to Claim 5, wherein said transformation includes matching of transforming device is further configured to match magnifications by matching a size of each of the extracted plurality of candidate images with a size of the reference image.

7. (currently amended) The image processing apparatus according to Claim 5, wherein said transformation includes alignment of transforming device is further configured to align barycenters by aligning a barycenter of each of the extracted plurality of candidate images with a barycenter of the reference image.

8. (currently amended) The image processing apparatus according to Claim 5, wherein the reference image and the plurality of candidate images are medical images.